
U.S. Department of the Interior • U.S. Geological Survey

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TUNGSTEN IN JUNE 1997

U.S. net production of intermediate tungsten products, including metal powder and tungsten carbide powder produced from hydrogen-reduced metal powder, during the first half of 1997 was basically the same as net production during the first half of 1996. However, U.S. reported consumption of tungsten in end-use products was 11% lower during the first half of 1997 as compared with reported consumption for the first half of 1996. Trade data for May 1997 are included in this issue. Trade data for June will be published in a subsequent issue.

Note

With the exception of prices, all data in this report have been rounded to no more than three significant digits. Totals were

calculated by using unrounded data.

Price

Prices for tungsten ore in dollars per metric ton unit (\$/mtu) from Metal Bulletin are listed below. Prices in dollars per short ton unit were converted from metric ton unit prices and rounded to the nearest dollar. These prices represent combined prices for wolframite and scheelite ores with a minimum WO_3 content of 65%.

August 1-31, 1997

Low \$40/mtu WO_3 (\$36/stu WO_3)

High 45/mtu WO_3 (\$41/stu WO_3)

TABLE 1
U.S. SALIENT TUNGSTEN STATISTICS 1/

(Metric tons, tungsten content)

Period	Concentrate			Reported scrap consumption τ /	Intermediate products		
	Reported consumption	Imports for consumption	Stocks, end of period 2/		Net production 3/	Reported consumption 4/	Stocks, end of period 5/
1996: p/							
January-December	5,420	4,190	569	2,450	7,530	11,300	1,360
1997:							
January	426	260	808	223	679	613 τ /	1,400
February	533	276	584	185	682	579 τ /	1,440
March	698	480	650	247	676	585 τ /	1,450
April	586 τ /	202	630 τ /	215	802 τ /	570	1,370
May	536 τ /	753	542 τ /	173	534 τ /	563 τ /	1,210 τ /
June	674	NA	596	228	764	570	1,300
Total	3,450	NA	XX	1,270	4,140	3,480	XX

p/ Preliminary. τ / Revised. NA Not available. XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Reported by consumers.

3/ Net production of tungsten metal powder, tungsten carbide powder, chemicals, and other products.

4/ Includes data on tungsten carbide powder from secondary sources.

5/ Reported by producers.

TABLE 2
U.S. PRODUCTION, CONSUMPTION, AND STOCKS OF
AMMONIUM PARATUNGSTATE, BY MONTH 1/

(Metric tons, tungsten content)

Period	Production	Consumption	Stocks, end of period 2/
1996: p/			
January-December	4,450 3/	7,720	558
1997:			
January	540	663	572
February	W	689	586
March	W	712	690
April	W	790 τ /	666 τ /
May τ /	645	716	750
June	765	W	W
Total	1,950	3,570	XX

p/ Preliminary. τ / Revised. W Withheld to avoid disclosing company proprietary data.

XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Producers and consumers.

3/ Excludes four months of withheld data.

TABLE 3
U.S. PRODUCTION AND STOCKS OF TUNGSTEN PRODUCTS 1/

(Metric tons, tungsten content)

Product	Net production 2/				Stocks at end of period		
	1996 p/	1997		Year to date	1996 p/	1997	
		May	June			May	June
Metal powder	3,720	133 τ /	329	1,770	815	723 τ /	726
Tungsten carbide powder (made from metal powder)	3,810	401 τ /	434	2,370	413	394 τ /	475
Cast and crystalline carbide powder; other	W	--	--	--	W	W	W
Chemicals	W	W	W	W	129	87 τ /	97
Total	7,530	534 τ /	764	4,140	1,360	1,210 τ /	1,300

p/ Preliminary. τ / Revised. W Withheld to avoid disclosing company proprietary data.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Gross production less quantity used to make other products in table.

TABLE 4
U.S. REPORTED CONSUMPTION OF TUNGSTEN, BY END USE IN 1997 1/ 2/

(Metric tons, tungsten content)

End use	May	June	Year to date
Steel:			
Tool	26	W	W
Other	10 r/	10	69
Superalloys	19	21	125
Other alloys (excludes steels and superalloys) 3/	W	W	W
Cemented carbides 4/ 5/	450 r/	462	2,790
Mill products made from metal powder	44	38	W
Chemical uses 6/	W	W	W
Miscellaneous and unspecified	14	39	502
Total	563 r/	570	3,480

r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Miscellaneous and unspecified."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Does not include materials used in making primary tungsten products.

3/ Includes welding and hard-facing rods and materials, wear- and corrosion-resistant alloys, and nonferrous alloys.

4/ Formerly called "Cutting and wear-resistant materials." Includes diamond bit matrices, cemented and sintered carbides, and cast carbide dies or parts.

5/ Based on reported consumption plus information from other sources.

6/ Formerly called "Chemical and ceramic uses."

TABLE 5
U.S. REPORTED CONSUMPTION AND CONSUMER STOCKS OF TUNGSTEN MATERIALS IN 1997 1/ 2/

(Metric tons, tungsten content)

Period	Ferro-tungsten	Tungsten metal powder	Tungsten carbide powder 3/	Scheelite (natural, synthetic)	Tungsten scrap	Other tungsten materials 4/	Total
Consumption:							
January	48 r/	38 r/	492 r/	--	29 r/	6	613 r/
February	48 r/	55 r/	442 r/	--	26 r/	8	579 r/
March	42 r/	46 r/	459 r/	--	28 r/	10	585 r/
April	47	60	428	--	27	8	570
May	34	59	436 r/	--	27	7	563 r/
June	33	53	453	--	21	11	571
January-June	253	312	2,710	--	158	50	3,480
Stocks:							
January	21	38 r/	293	--	23 r/	11	387
February	24 r/	26 r/	280	--	22 r/	12	363
March	24	26 r/	297 r/	--	26 r/	17	390 r/
April	25	26	303	--	29	12	394 r/
May	18	26	286 r/	--	27 r/	19	376 r/
June	17	26	314	--	26	14	396

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Does not include materials used in making primary tungsten products.

3/ Based on reported consumption plus information from other sources.

4/ Includes tungsten chemicals.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF TUNGSTEN, BY COUNTRY 1/

(Metric tons, tungsten content)

Period and country of origin	Ores and concentrates	Ammonium tungstates	Ferro- tungsten	Metal powder	Tungsten carbide	Other e/ 2/	Total	Total year to date
1996 total	4,190	1,580	535	404	404	2,820	9,930	XX
1997:								
March	480	197	123	8	4,070	103	4,980	6,790
April	202	140	30	17	62	175	625	7,420
May:								
Australia	--	--	--	--	--	--	--	(3/)
Austria	--	--	--	--	--	2	2	17
Belgium	--	--	--	22	--	(3/)	22	24
Bolivia	35	--	--	--	--	--	35	182
Canada	(3/)	--	--	1	--	--	1	10
Chile	11	--	--	--	--	--	11	11
China	--	206	--	9	23	136	374	5,720
Czech Republic	--	--	--	6	--	--	6	8
France	--	--	--	9	(3/)	1	10	21
Germany	--	--	1	3	12	1	17	171
Hong Kong	--	--	--	--	--	--	--	128
Hungary	--	--	--	--	--	(3/)	(3/)	3
India	--	--	--	--	1	(3/)	1	4
Ireland	--	--	--	--	(3/)	--	(3/)	(3/)
Israel	--	--	--	--	3	1	4	13
Japan	--	--	--	2	--	2	4	46
Kazakstan	89	--	--	--	--	--	89	373
Korea, Republic of	--	--	--	--	1	--	1	3
Mexico	14	--	--	--	--	1	15	88
Netherlands	3	--	--	--	--	1	4	17
Peru	11	--	--	--	--	--	11	85
Portugal	20	--	--	--	--	--	20	378
Russia	544	--	129	--	--	52	726	1,260
Rwanda	25	--	--	--	--	--	25	51
Singapore	--	--	--	--	--	--	--	(3/)
Spain	--	--	--	--	(3/)	--	(3/)	(3/)
Sweden	--	--	--	--	1	(3/)	1	54
Switzerland	--	--	--	--	--	1	1	3
Taiwan	--	--	--	--	--	--	--	(3/)
Thailand	--	--	--	--	--	--	--	15
Turkey	--	--	--	--	--	1	1	1
United Kingdom	--	--	--	1	(3/)	(3/)	1	124
Total	753	206	130	53	40	198	1,380	8,800
Total, year to date	1,970	993	401	128	4,230	1,080	8,800	XX

e/ Tungsten content estimated in part. XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes other unwrought tungsten, wrought tungsten, calcium and other tungstates, tungsten oxides, tungsten chlorides, other tungsten compounds, ash and residues containing mainly tungsten, and other mixtures of inorganic compounds containing tungsten.

3/ Less than 1/2 unit.

Note: Imports of waste and scrap in May 1997 totaled 99 metric tons, tungsten content.

Source: Bureau of the Census.

TABLE 7
U.S. EXPORTS OF TUNGSTEN, BY COUNTRY 1/

(Metric tons, tungsten content)

Period and country of destination	Ores and concentrates e/	Ammonium tungstates	Metal powder e/	Tungsten carbide	Other e/ 2/	Total	Total year to date
1996 total	17	150	240	1,290	289	1,990	XX
1997:							
March	(3/)	--	23	92	46	160	396
April	--	10	23	92	44	169	565
May:							
Argentina	--	--	--	--	--	--	(3/)
Australia	--	--	(3/)	(3/)	(3/)	1	4
Austria	--	--	--	(3/)	--	(3/)	7
Belgium	--	--	--	(3/)	--	(3/)	1
Brazil	--	--	(3/)	(3/)	--	(3/)	3
Canada	--	--	5	27	5	37	209
Chile	--	--	--	--	(3/)	(3/)	1
China	3	--	(3/)	--	(3/)	3	3
Denmark	--	--	--	(3/)	--	(3/)	(3/)
Egypt	--	--	--	--	--	--	(3/)
Finland	--	--	--	--	--	--	(3/)
France	--	--	--	--	(3/)	(3/)	26
Germany	--	--	25	9	19	53	185
Greece	--	--	--	--	--	--	(3/)
Guatemala	--	--	--	--	--	--	(3/)
Hong Kong	--	--	--	--	2	2	4
Hungary	--	--	--	--	1	1	6
India	(3/)	--	--	(3/)	3	4	14
Indonesia	--	--	--	--	--	--	(3/)
Ireland	--	--	--	1	--	1	2
Israel	--	--	(3/)	--	1	1	2
Italy	--	--	2	7	2	10	34
Japan	--	--	--	2	3	5	43
Korea, Republic of	--	--	--	(3/)	1	1	10
Lithuania	--	--	--	--	1	1	1
Luxembourg	--	--	--	--	--	--	(3/)
Mexico	--	--	--	(3/)	4	4	17
Netherlands	--	--	--	--	(3/)	(3/)	7
New Zealand	--	--	--	--	--	--	(3/)
Norway	--	--	--	--	--	--	(3/)
Papua New Guinea	--	--	--	--	--	--	(3/)
Peru	--	--	--	--	--	--	1
Philippines	--	--	--	--	--	--	1
Portugal	--	--	--	--	--	--	3
Saudi Arabia	--	--	--	(3/)	--	(3/)	(3/)
Singapore	--	--	--	2	(3/)	3	6
Slovakia	--	--	--	--	--	--	(3/)
South Africa	--	--	(3/)	10	--	10	23
Spain	--	--	(3/)	--	2	2	6
Sweden	--	--	--	12	(3/)	12	54
Switzerland	--	--	4	--	--	4	10
Taiwan	--	--	--	(3/)	1	2	13
Thailand	--	--	--	--	(3/)	(3/)	1
Turkey	--	--	--	--	--	--	1
United Arab Emirates	--	--	--	--	--	--	(3/)
United Kingdom	--	--	1	4	1	5	27
Venezuela	--	--	(3/)	1	--	1	3
Other	--	--	--	--	(3/)	(3/)	1
Total	3	--	38	77	45	162	729
Total, year to date	8	10	110	410	189	729	XX

e/ Tungsten content estimated in part. XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes wrought tungsten, ferrotungsten, and other tungstates.

3/ Less than 1/2 unit.

Note: Estimated exports of waste and scrap in May 1997 totaled 35 metric tons, tungsten content.

Source: Bureau of the Census.